JAMES D. VANCE

107 Monroe Street Hoboken, New Jersey 07030 Phone 443-994-0145

May 31, 2018

The Honorable Phil Murphy Governor of New Jersey P.O. Box 001 Trenton, NJ 08625

Dear Governor Murphy:

There are three very good reasons not to cluster diesel exhaust emitting ferries in a densely populated, urban environment: air pollution, air pollution and air pollution.

The Union Dry Dock Yard is a short distance from a large condominium complex, and older, residential neighborhoods. It is only yards from a heavily used, five-acre park, and adjacent to a busy skateboard park. Just to the north of Union Dry Dock is the only natural sand beach on New Jersey Hudson River coastline, providing a safe and protected environment for the thousands of kayakers and paddle boarders who get into the river there during the summer months.

Abutting its west perimeter are a busy sidewalk, jogging path, and bicycle lane. It is also just down the hill from a school, Stevens Institute of Technology. The pollution will adversely affect hundreds daily. The attached article downloaded from Union of Concerned Scientists' website tells the story.

The State of New Jersey needs to do its job of protecting the health of the citizens of Hoboken by placing the ferry maintenance facility in an appropriate location. NJ Transit's 2009 Alternate Analysis Study has identified five sites more suitable than the Union Dry Dock property.

Sincerely,

James D. Vance



Diesel Engines and Public Health

With mounting evidence that diesel exhaust poses major health hazards, reducing diesel pollution has become a public priority.

Health Impacts of Diesel Pollution

Diesel-powered vehicles and equipment account for nearly half of all nitrogen oxides (NOx) and more than two-thirds of all particulate matter (PM) emissions from US transportation sources.

Particulate matter or soot is created during the incomplete combustion of diesel fuel. Its composition often includes hundreds of chemical elements, including sulfates, ammonium, nitrates, elemental carbon, condensed organic compounds, and even carcinogenic compounds and heavy metals such as arsenic, selenium, cadmium and zinc.¹ Though just a fraction of the width of a human hair, particulate matter varies in size from coarse particulates (less than 10 microns in diameter) to fine particulates (less than 2.5 microns) to ultrafine particulates (less than 0.1 microns). Ultrafine particulates, which are small enough to penetrate the cells of the lungs, make up 80-95% of diesel soot pollution.

Particulate matter irritates the eyes, nose, throat, and lungs, contributing to respiratory and cardiovascular illnesses and even premature death. Although everyone is susceptible to diesel soot pollution, children, the elderly, and individuals with preexisting respiratory conditions are the most vulnerable. Researchers estimate that, nationwide, tens of thousands of people die prematurely each year as a result of particulate pollution. Diesel engines contribute to the problem by releasing particulates directly into the air and by emitting nitrogen oxides and sulfur oxides, which transform into "secondary" particulates in the atmosphere.

Diesel emissions of nitrogen oxides contribute to the formation of ground level ozone, which irritates the respiratory system, causing coughing, choking, and reduced lung capacity. Ground level ozone pollution, formed when nitrogen oxides and hydrocarbon emissions combine in the presence of sunlight, presents a hazard for both healthy adults and individuals suffering from respiratory problems. Urban ozone pollution has been linked to increased hospital admissions for respiratory problems such as asthma, even at levels below the federal standards for ozone.

Diesel exhaust has been classified a potential human carcinogen by the U.S. Environmental Protection Agency (EPA) and the International Agency for Research on Cancer. Exposure to high levels of diesel exhaust has been shown to cause lung tumors in rats, and studies of humans routinely exposed to diesel fumes indicate a greater risk of lung cancer. For example, occupational health studies of railroad, dock, trucking, and bus garage workers exposed to high levels of diesel exhaust over many years consistently demonstrate a 20 to 50 percent increase in the risk of lung cancer or mortality. ²

¹ Particulate Matter (TSP and PM-10) in Minnesota. Minnesota Pollution Control Agency. December 1997.

² Health Assessment Document for Diesel Engine Exhaust. National Center for Environmental Assessment, Office of Research and Development, US EPA. Washington D.C. May 2002. page 9-11. EPA/600/8-90/057F.